

IN THE CLAIMS

Please cancel claims 1-11, 14-16, and 18-20.

Please amend claims 12, 13, and 17 as set forth below.

Please add the following new claims 21-34 as set forth below.

A complete listing of all claims in this application is set forth below.

Claims 1-11 (canceled).

12. (Currently amended) ~~The system of claim 11 comprising~~ A modular long bone prosthesis system for replacing all or a portion of a long bone having a head and neck at its proximal end and a pivot axis about which the bone with which the long bone articulates pivots at the distal end, the system comprising:

a proximal component configured to replace the neck of the long bone and to receive a component for replacing the head at a proximal end, a distal component configured at its distal end to include a pivot axis about which the bone with which the long bone articulates may pivot, a retroversion component, a spacer component, and a stem component and wherein:

the proximal component is configured on its distal end to mount to one of the retroversion component, the stem component and the spacer component;

the distal component is configured on its proximal end to mount to one of the retroversion component, the stem component and the spacer component;

the retroversion component is configured to mount at one end to one of the distal component and the spacer component and at the other end to one of the proximal component and the spacer component;

the spacer component is configured at one end to mount to one of the distal component and the proximal component and at the other end to mount to one of the retroversion component and the stem component;

the stem component is configured at one end to couple to one of the distal component, the proximal component and the spacer component and configured at the other end to be received in the intramedullary canal of the long bone; and

wherein the proximal component, distal component and retroversion component when coupled form a total long bone prosthesis exhibiting a retroversion angle found in the long bone, the proximal and stem components when coupled form a proximal prosthesis, and the distal and stem components when coupled form a distal prosthesis;

wherein the proximal component, distal component and retroversion component when coupled in a first configuration form a right total long bone prosthesis and when coupled in a second configuration form a left total long bone prosthesis;

wherein the spacer segment when coupled between the proximal and distal components of the total long bone prosthesis forms a longer total long bone prosthesis;

further comprising a plurality of spacer components each having a differing length and configured at one end to mount to one of the distal component and the proximal component and at the other end to mount to one of the retroversion component and the stem component;

and further comprising a second stem component and an intercalary component configured at both ends to mount to one of a stem component and a spacer component and the intercalary component first stem component and second stem component when coupled form an intercalary prosthesis.

13. (Currently amended) ~~The system of claim 8~~ A modular long bone prosthesis system for replacing all or a portion of a long bone having a head and neck at its proximal end and a pivot axis about which the bone with which the long bone articulates pivots at the distal end, the system comprising:

a proximal component configured to replace the neck of the long bone and to receive a component for replacing the head at a proximal end, a distal component configured at its distal end to include a pivot axis about which the bone with which the long bone articulates may pivot, a retroversion component, a spacer component, and a stem component and wherein:

the proximal component is configured on its distal end to mount to one of the retroversion component, the stem component and the spacer component;

the distal component is configured on its proximal end to mount to one of the retroversion component, the stem component and the spacer component;

the retroversion component is configured to mount at one end to one of the distal component and the spacer component and at the other end to one of the proximal component and the spacer component;

the spacer component is configured at one end to mount to one of the distal component and the proximal component and at the other end to mount to one of the retroversion component and the stem component;

the stem component is configured at one end to couple to one of the distal component, the proximal component and the spacer component and configured at the other end to be received in the intramedullary canal of the long bone; and

wherein the proximal component, distal component and retroversion component when coupled form a total long bone prosthesis exhibiting a retroversion angle found in the long bone, the proximal and stem components when coupled form a proximal prosthesis, and the distal and stem components when coupled form a distal prosthesis.

wherein the spacer component is formed to include a suture attachment location for attachment of a ligament of a muscle to the prosthesis.

Claims 14-16 (canceled).

17. (Currently amended) ~~The device of claim 16~~ A modular humeral prosthesis system for replacing all or a proximal part of either a right or left human humerus having a head forming a retroversion angle with the pivot axis of the forearm, the system comprising:

a proximal component configured to replace the neck of the humerus and to receive a component for replacing the head of the humerus at a proximal end, a distal component configured at its distal end to include a pivot axis about which the forearm pivots, a retroversion component, a plurality of spacer components, and a stem component, wherein:

the proximal component is configured on its distal end to mount to one of the retroversion component, the stem component and one of the plurality of the spacer components;

the distal component is configured on its proximal end to mount to one of the retroversion component, the stem component and one of the plurality of the spacer components;

the retroversion component is configured to mount at one end to one of the distal component and one of the plurality of the spacer components and at the other end to one of the proximal component and one of the plurality of the spacer components;

each spacer component is configured at one end to mount to one of the distal component and the proximal component and at the other end to mount to one of the retroversion component and the stem component and one of the plurality of spacer components is longer than the other of the plurality of spacer components;

the stem component is configured at one end to couple to one of the distal component, the proximal component and the spacer component and configured at the other end to be received in the intramedullary canal of the long bone; and

wherein the proximal component, distal component and retroversion component when coupled form a total humeral prosthesis exhibiting a retroversion angle found in the humerus, the proximal and stem components when coupled form a proximal humeral prosthesis, and the distal and stem components when coupled form a distal humeral prosthesis.

wherein when the proximal component, distal component and retroversion component are mounted in a first orientation, a right total humeral prosthesis is formed, and wherein when the proximal component, distal component and retroversion component are mounted in a second orientation, a left total humeral prosthesis is formed,

wherein one of the proximal component and the retroversion component is formed to include an indicator mark and the other of the proximal component and retroversion component is formed to include a first alignment mark and a second alignment mark and wherein when the indicator is aligned with the first alignment mark, the proximal component, distal component and retroversion component are mounted in the first orientation and when the indicator mark is aligned with the second alignment mark the proximal component, distal component and retroversion component are mounted in the second orientation, and

wherein the indicator is a tab and the first alignment mark is a slot.

Claims 18-20 (canceled).

21. (New) A modular long bone prosthesis, comprising:

a proximal component having a first coupler at a proximal end thereof and a second coupler at a distal end thereof;

a retroversion component having third coupler at a proximal end thereof and a fourth coupler at a distal end thereof, said third coupler being configured to mate with said second coupler of said proximal component so as to retain said retroversion component in fixed relation to said proximal component;

a head component having a fifth coupler configured to mate with the first coupler of said proximal component so as to retain said head component in fixed relation to said proximal component,

wherein said one of said proximal component and said retroversion component has a tab, and

wherein the other one of said proximal component and said retroversion component has a first slot and a second slot,

wherein said proximal component and said retroversion component are configurable between a right long bone mode and a left long bone mode,

wherein when in said right long bone mode (i) said second coupler of said proximal component is positioned in mating relationship with said third coupler of said retroversion component, (ii) said tab is positioned in said first slot, and (iii) no tab is positioned in said second slot, and

wherein when in said left long bone mode (i) said second coupler of said proximal component is positioned in mating relationship with said third coupler of said retroversion component, (ii) said tab is positioned in said second slot, and (iii) no tab is positioned in said first slot.

22. (New) The modular long bone prosthesis of claim 21, further comprising:

an additional bone component having a sixth coupler configured to mate with said fifth coupler of said retroversion component so as to retain said retroversion component in fixed relation to said additional bone component.

23. (New) The modular long bone prosthesis of claim 21, further comprising:

a spacer component having (i) a sixth coupler at a proximal end thereof, said sixth coupler being configured to mate with said fifth coupler of said retroversion component so as to retain said retroversion component in fixed relation to said spacer component, and (ii) a seventh coupler at a distal end thereof; and

a distal component having (i) an eighth coupler at a proximal end thereof, said eighth coupler being configured to mate with said seventh coupler of said spacer component, and (ii) a ninth coupler configured to attach to a joint prosthesis component.

24. (New) The modular long bone prosthesis of claim 23, wherein:
said proximal component, said retroversion component, said head component, said spacer component, and said distal component collectively comprise a humeral prosthesis, and

said joint prosthesis component is an ulnar prosthesis component.

25. (New) The modular long bone prosthesis of claim 21, wherein said first slot and said second slot are positioned adjacent to each other.

26. (New) The modular long bone prosthesis of claim 21, wherein:
said retroversion component defines a central axis, and
when said retroversion component is viewed in a plan view in a direction defined by said central axis, (i) said first slot defines a first slot center point, (ii) said second slot defines a second slot center point, (iii) said first slot center point is offset from said second slot center point by θ° along an outside periphery of said retroversion component, and (iv) $10^\circ \leq \theta \leq 90^\circ$.

27. (New) The modular long bone prosthesis of claim 26, wherein θ is about 40° .

28. (New) A modular long bone prosthesis, comprising:

a proximal component having a first coupler;

a retroversion component having second coupler being configured to mate with said first coupler of said proximal component so as to retain said retroversion component in fixed relation to said proximal component;

wherein said one of said proximal component and said retroversion component has a tab, and

wherein the other one of said proximal component and said retroversion component has a first slot and a second slot,

wherein said proximal component and said retroversion component are configurable between a right long bone mode and a left long bone mode,

wherein when in said right long bone mode (i) said first coupler of said proximal component is positioned in mating relationship with said second coupler of said retroversion component, (ii) said tab is positioned in said first slot, and (iii) no tab is positioned in said second slot, and

wherein when in said left long bone mode (i) said first coupler of said proximal component is positioned in mating relationship with said second coupler of said retroversion component, (ii) said tab is positioned in said second slot, and (iii) no tab is positioned in said first slot.

29. (New) The modular long bone prosthesis of claim 28, further comprising an additional bone, wherein:

said retroversion component has a third coupler positioned, and

said additional bone component has a fourth coupler configured to mate with said third coupler of said retroversion component so as to retain said retroversion component in fixed relation to said additional bone component.

30. (New) The modular long bone prosthesis of claim 21, wherein said retroversion component has a third coupler, further comprising:

a spacer component having (i) a fourth coupler configured to mate with said third coupler of said retroversion component so as to retain said retroversion component in fixed relation to said spacer component, and (ii) a fifth coupler; and

a distal component having (i) a sixth coupler configured to mate with said fifth coupler of said spacer component, and (ii) a seventh coupler configured to attach to a joint prosthesis component.

31. (New) The modular long bone prosthesis of claim 30, wherein:
said proximal component, said retroversion component, said spacer component, and said distal component collectively comprise a humeral prosthesis, and
said joint prosthesis component is an ulnar prosthesis component.

32. (New) The modular long bone prosthesis of claim 28, wherein said first slot and said second slot are positioned adjacent to each other.

33. (New) The modular long bone prosthesis of claim 28, wherein:
said retroversion component defines a central axis, and
when said retroversion component is viewed in a plan view in a direction defined by said central axis, (i) said first slot defines a first slot center point, (ii) said second slot defines a second slot center point, (iii) said first slot center point is offset from said second slot center point by θ° along an outside periphery of said retroversion component, and (iv) $10^\circ \leq \theta \leq 90^\circ$.

34. (New) The modular long bone prosthesis of claim 33, wherein θ is about 40° .